CLAIMS

1. A spark gap device (7) for a high-power electric generator, said device being designed for high voltages and comprising an electric trigger system (4, 6), furthermore at least two mutually spaced main electrodes (3) which in particular are spheres and cooperate pairwise, and means (1) to close the current loop that are separated by a dielectric (2) from the main electrodes,

characterized in that

the electric trigger system (4, 6) comprises as many trigger electrodes (6) as there are main electrodes (3) in the spark gap device, said trigger electrodes (4) being fitted with a protective insulator (4) and each being received in a different main electrode (3) of the spark gap device.

2. Spark gap device (7) for a high-power electric generator as claimed in claim 2, characterized in that the spark gap device's main electrodes (3) are kept in place on the dielectric (2) by means of slides (8).

3. A spark gap device for a high-power electric generator as claimed in claim 2, characterized in that the main electrodes (3) may slide in the slides (8) and may be individually forced by means (9) such as springs against the dielectric (2).

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4. A spark gap device for a high-power electric generator as claimed in any of the above claims, characterized in that said device (7) is a high-voltage, multi-gap spark device operating in air at atmospheric pressure or at higher pressure, the gap between the main electrodes being controlled by a spacer (10).

5. A spark gap device (7) for a high-power electric generator as claimed in any of the above claims, characterized in that the dielectric (2) consists of thin insulating layers.

6. A spark gap device (7) for a high-power electric generator as claimed in any of the above claims, characterized in that the protecting insulator (4) is provided by a high-voltage cable.

7. A spark gap device for a high-power electric generator as claimed in any of the above claims, characterized in that the trigger electrode (6) is a rigid tube.